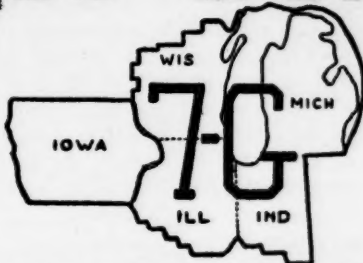
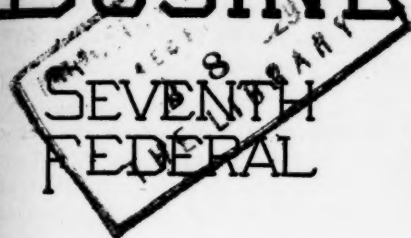


BUSINESS CONDITIONS



RESERVE
DISTRICT

Volume 12, No. 2

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

February 1, 1929

NATIONAL SUMMARY OF BUSINESS CONDITIONS

INDUSTRY and trade continued active in December, and the general level of prices remained unchanged. Banking and credit conditions at the turn of the year were influenced chiefly by seasonal changes in the demand for currency and by requirements for end-of-year financial settlements.

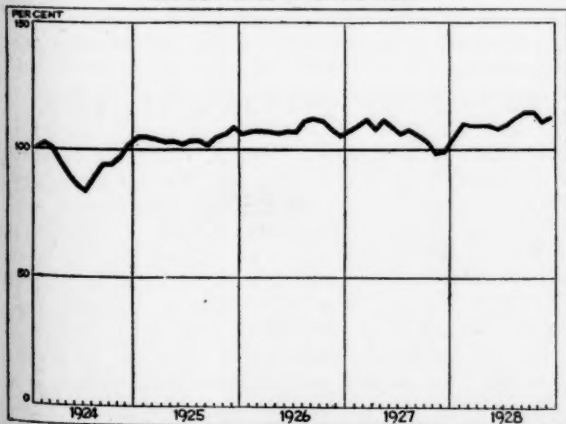
PRODUCTION.—Output of manufactures decreased in December, but the decline was less than is usual during the month, and the Board's index was slightly higher than in November and above the level of a year ago. Smaller than usual seasonal reductions were reported in the daily average output of steel, pig iron, automobiles, copper, cement, silk, and flour, while cotton and wool textiles declined considerably. Meat packing increased in December, reflecting a larger output of pork products, though beef and mutton production was smaller. Volume of factory employment and payrolls was larger than at this season of last year. Production of minerals was in somewhat smaller volume in December than in November, reflecting chiefly a large reduction in the output of bituminous and anthracite coal. Production of copper and zinc ore on a daily average basis was slightly smaller, while petroleum output increased. Preliminary reports for the first half of January indicate a steady increase in the output of petroleum and greater activity in the steel, automobile, coal, and

lumber industries following the temporary lull during the inventory period at the end of the year. Building contracts awarded in thirty-seven eastern states declined sharply during December, as in the preceding month, and were smaller than in any December since 1924. The decline from November was attributable largely to decreases in awards for residential building and public works and utilities. By districts the largest declines over the preceding month were in the Cleveland, Chicago, Boston, and Richmond Federal Reserve districts, while increases were reported in the New York, Philadelphia, and Atlanta districts.

TRADE.—Department store trade showed greater activity in December than in the preceding month, after allowance is made for the customary holiday increase. Total sales for the month were the largest on record, exceeding December 1927 by one per cent, although there was one less trading day this year. Increases over a year ago were reported for the New York and Philadelphia districts, while substantial decreases occurred in Atlanta and Minneapolis. Distribution at wholesale declined seasonally and was smaller than a year ago.

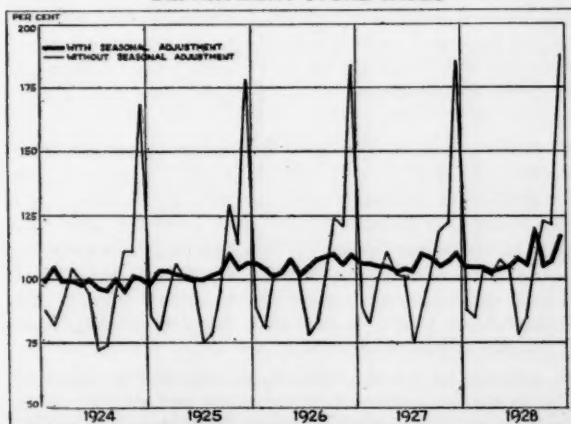
Freight carloadings in December and the first half of January showed a slightly larger than usual seasonal reduction, but, as in earlier months, were above a year ago.

INDUSTRIAL PRODUCTION



Index number of production of manufactures and minerals combined, adjusted for seasonal variations (1923-1925 average = 100). Latest figure, December, 1928: 112.

DEPARTMENT STORE SALES



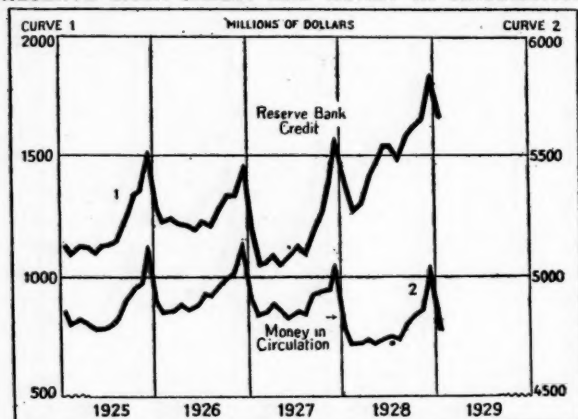
The Federal Reserve Board's index of department store sales (1923-1925 average = 100). Latest figures, December, 1928: Adjusted Index, 117; Unadjusted Index, 188.

Compiled January 26, 1929

PRICES.—The general level of wholesale prices, as measured by the index of the United States Bureau of Labor Statistics, remained approximately the same during December as in the preceding month. Average prices of iron and steel, automobiles, copper, and building materials continued to advance slowly, and prices of farm products, after declining during October and November, also rose in December, reflecting higher average prices for raw cotton, oats, rye, and some grades of wheat, offset in part by lower prices for corn and cattle. In the first three weeks of January the price of rubber advanced sharply, and wheat, corn, potatoes, and flour also increased, while silk and sugar decreased somewhat, and hides reached the lowest level in more than a year.

BANK CREDIT.—Banking and credit conditions in January were influenced chiefly by the seasonal decline in the volume of money in circulation. At the reserve banks

RESERVE BANK CREDIT AND MONEY IN CIRCULATION



Monthly averages of daily figures. Latest figures, averages of first 23 days in January, 1929: Reserve Bank Credit, 1,656 million; Money in Circulation, 4,779 million.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

The year 1928 in this district has been one of considerable expansion in industry and trade, with all-time records established in some instances. The data for the closing month show marked expansion over November in a number of distributive lines, notably, department store, chain store, and retail shoe trade, together with wholesale distribution of automobiles; gains were also reported in sales of agricultural machinery, of retail furniture, and in shipments of flour and malleable castings. Other lines reporting to this bank experienced a recession from November, but distribution generally was at a higher level than a year ago.

Production in most industries declined in December from the preceding month; coal mining, animal slaughter, and the manufacture of butter and agricultural machinery increased over November. Gains were recorded over last December in the production of iron and steel, automobiles, agricultural machinery, packing-house products, butter, and furniture, while recessions were shown in coal mining, and the manufacture of flour and cheese. Employment remained near the November level.

In agricultural phases, December marked a seasonal decline in the marketing of cattle, lambs, and wheat and an increase in the movement of hogs, corn, and oats.

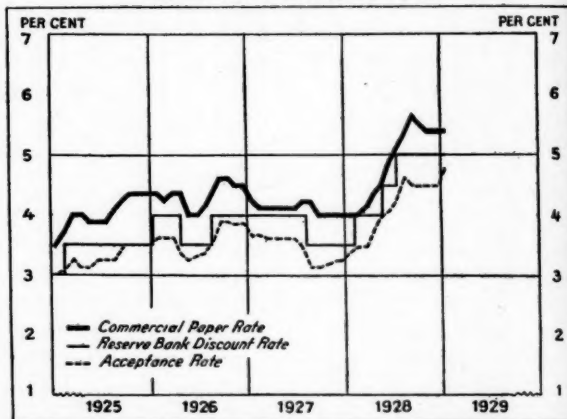
During the greater part of the year demand for funds in the district was strong with a rising trend in rates.

the return flow of currency from circulation resulted in a liquidation of member bank borrowing and small declines in reserve bank holdings of acceptances and of United States securities. Total bills and securities showed a decline of about \$450,000,000 for the period from December 26 to January 23 and were in about the same volume as in midsummer of last year.

At member banks there was an increase in the total volume of loans at the turn of the year due chiefly to year-end financial settlements, and the temporary withdrawal of funds loaned by corporations in the New York market. In January deposits and loans of member banks declined to approximately the level of the early part of December.

In the money market, rates on call loans declined sharply in January, while rates on time loans on securities remained firm and rates on acceptances advanced.

MONEY RATES IN NEW YORK



Monthly rates in the open market in New York: commercial paper rate on 4- to 6-month paper and acceptance rate on 90-day bankers' acceptances. Latest figures, averages of first 23 days in January, 1929: Commercial Paper Rate, 5.38 per cent; Acceptance Rate, 4.75 per cent; New York Reserve Bank Discount Rate, 5 per cent.

Reserve bank credit in use and Federal Reserve note circulation, as well as deposits and loans and discounts of reporting member banks, have decreased somewhat in recent weeks but are above last year. Savings deposits, however, gained over November and over December 1927. December payments by check exceeded those of November and the corresponding period of 1927. Commercial paper sales were in small volume, while the volume of bills accepted at reporting banks was at the highest point since August 1927.

CREDIT CONDITIONS AND MONEY RATES

Demand for funds in the Chicago money market is strong, with little change in volume, either for commercial purposes or on stocks and bonds, thus far in January. Other centers in the district also are experiencing relatively heavy credit requirements, though in agricultural sections considerable liquidation of indebtedness has taken place as the result of farmers' sales of hogs, cattle, and corn. Rate changes have been slight; in Chicago stock brokers' demand loans continue to carry 7 per cent, customers' over-the-counter loans 5½ to 6 per cent as against 5½ to 5¾ a month ago, and collateral loans remain at 6 to 6½ per cent. The average rate earned on loans and discounts by ten large banks in Chicago during the calendar month of December was 6.12 per cent, in comparison with 5.86 per cent in November and 4.87 per cent in December

1927. In Detroit, this item as reported by five large banks was 5.88 per cent in December and 5.81 per cent in November, reflecting a slight rise in rates in that city; for December 1927, the figure was 5.31 per cent. The prevailing rate in the latter city on customers' commercial loans during the week ended January 15 was $5\frac{1}{4}$ -6 per cent.

The total volume of bills and securities held by the Federal Reserve Bank of Chicago on January 16 amounted to \$224,677,000, as compared with \$251,416,000 on December 19 and \$211,297,000 on January 11, 1928. Loans to member banks on December 26 expanded to \$201,769,000, which was the high mark since October 19, 1921; since the beginning of the year, however, they have exhibited a downward tendency and on January 16 amounted to \$147,364,000, which is lower than the \$175,951,000 reported on December 19, but more than double the \$64,131,000 reported on January 18, 1928. United States securities on January 16 totaled \$33,885,000, which compares with \$34,321,000 and \$79,079,000, respectively, on the corresponding reporting dates a month and a year ago. The volume of Federal Reserve notes on December 26 amounted to \$331,855,000, representing the largest volume in circulation since March 12, 1924; by January 16, it had dropped to \$292,315,000, which compares with \$318,211,000 as of December 19 and \$237,401,000 on January 18 last year.

Loans and discounts of reporting member banks in the district on January 9 aggregated \$2,580,662,000, showing a decline in volume from December 12, when \$2,616,820,000 was reported, and comparing with \$2,394,405,000 as of January 11, 1928. Both commercial and collateral loans at Chicago and Detroit were reduced in the monthly comparison. Investments on January 9 totaled \$754,521,000, as compared with \$749,805,000 on December 12 and \$791,992,000 on January 11 last year. Net demand deposits dropped to \$1,887,870,000 on January 9 from \$1,916,358,000 on December 12, and compared with \$1,931,695,000 as of January 11, 1928. Time deposits amounted to \$1,275,982,000 on January 9, or about the same as a month ago, comparing with \$1,200,062,000 for the corresponding date last year. Figures of reporting member banks have been revised, details of which revision will be found in the January issue of the Federal Reserve Bulletin.

December sales of commercial paper in the Middle West, as reported by ten companies, were the smallest of any month since this bank began collecting records thereon—January 1923—falling slightly below the June 1928 low and being 25.1 per cent less than in November and 24.1 per cent below a year ago. Demand was indicated as fair to good, with the supply limited to fair. Sales of four local concerns for the first half of January totaled in excess of those for the corresponding period of the preceding month. Supply and demand were reported as fair to good. Selling quotations for December ranged from $5\frac{1}{4}$ per cent for low to $5\frac{1}{2}$ and 6 per cent for high, $5\frac{1}{2}$ and $5\frac{3}{4}$ prevailing as the high figure, with the customary charge $5\frac{1}{4}$ to $5\frac{1}{2}$ per cent. Rates closed on January 14 at the same levels mentioned above, although some firms reported a slightly firmer tendency than in December. Outstandings of five dealers in the Middle West aggregated 9.9 per cent less on December 31 than on November 30 and were 20.7 per cent smaller than for the corresponding date of last year; holdings of twenty-three dealers in the United States amounted to \$383,000,000 on December 31.

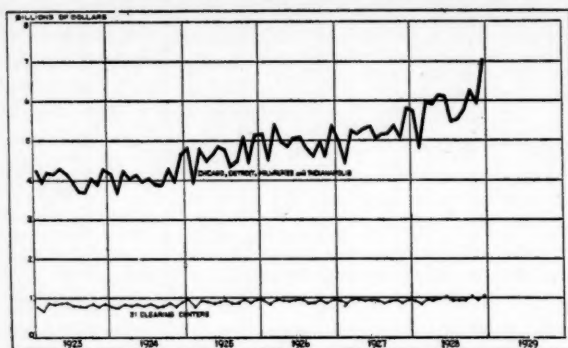
Average weekly purchases of six dealers in the Chicago open bill market were 52.5 per cent greater from December 13 to January 16 than in the preceding period and 70.7 per cent in excess of a year ago, while sales declined 39.8

per cent and gained 15.4 per cent in the respective comparisons. Receipts from other offices decreased 59.4 per cent compared with those of November 15 to December 12 and increased 48.8 per cent over last year. Shipments to other offices averaged 260.3 per cent larger from December 13 to January 16 than in the preceding period and were 763.7 per cent heavier than from December 15, 1927 to January 18, 1928. Demand was poor to fair during the month, while the supply of bills was fair to good. Demand at the beginning of the period centered on 60- and 90-day bills but became more general in January when a good movement of 150- and 180-day maturities also was reported. Commodities involved in the transactions consisted of grain, canned goods, silver, iron, machinery, cotton, apples, rice, packing-house products, burlap, dollar exchange, books, sausage casings, rags, flour, sauce, leather, textiles, coffee, and steel scrap. Quotations firmed during the period and closed on January 16 at $4\frac{1}{2}$ per cent for 30-day offerings to 5 per cent for those of 150 and 180 days. Rates advanced $\frac{1}{8}$ to $\frac{1}{4}$ per cent on January 18. Holdings were 15.4 per cent larger on January 16 than on December 12 and totaled 33.8 per cent in excess of a year ago.

The aggregate volume of bills accepted in December by sixteen reporting banks in the Seventh district with the single exception of August 1927, was greater than in any month since February 1925, being 49.5 per cent larger than in November and 63.7 per cent in excess of a year ago. Purchases increased 40.6 per cent over the preceding period but were 84.2 per cent less than last year; sales gained 96.6 per cent and decreased 50.4 per cent in the respective comparisons. Acceptances of four local banks for the first half of January totaled greater than for the corresponding period of December. Bills involved transactions in cotton, grain, iron ore, packing-house products, sugar, iron and steel, general merchandise, copper, poultry, wool, tobacco, crude rubber, coffee, electrical machinery, benzol, lead, potash, shoes, silver, and tea. Liability of the banks for outstanding acceptances stood at a higher level on December 31 than for any reporting date since March 1925, having risen 27.5 per cent over the close of November and over the corresponding period of 1927. Holdings exceeded those of November 30 by 25.4 per cent but showed a decline of 11.4 per cent from a year ago; portfolios contained 39.0 per cent more of the banks' own bills than at the close of November. The Federal Reserve Bank of Chicago purchased \$27,292,737 in bankers' acceptances during the month and had \$39,078,046 of this class of bills on hand on December 31.

Volume of Payment by Check—Causes largely seasonal resulted in the volume of payment by check for December rising to \$8,135,291,000, which amount, an aggregate of figures reported by clearing houses of thirty-seven cities in the Seventh district, showed increases of 18.1 per cent over November and 19.5 per cent over December 1927. The total volume in the four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, \$7,061,608,000, was 19.3 per cent and 21.2 per cent larger in the respective monthly and yearly comparisons. Chicago with a total of \$4,955,471,000 recorded increases of 15.6 per cent and 14.1 per cent in the above mentioned comparisons. The aggregate for Detroit, \$1,582,137,000, showed unusually large gains of 39.4 per cent over November and 62.3 per cent over December 1927; \$1,073,683,000 made up the total volume for the thirty-three smaller cities, which was 10.5 per cent over that of the preceding month and 9.6 per cent larger than in the corresponding month of 1927.

VOLUME OF PAYMENT BY CHECK
Checks Drawn on Clearing House Banks—7th District



Figures used are estimates for calendar months, based on weekly reports to this bank. Latest figures, December, 1928, in thousands of dollars: Chicago, Detroit, Milwaukee, and Indianapolis, 7,061,608; and 31 Other Clearing House Centers, 1,041,834.

Savings Deposits—The volume of regular savings deposits in the Seventh Federal Reserve district was 1.1 per cent larger on December 31 than that of the preceding period and was accompanied by an increase of 0.1 per cent

AGRICULTURAL PRODUCTION AND FOODSTUFFS

Grain Marketing—December receipts of wheat at interior primary markets in the United States were seasonally less than in the preceding month but larger than last year and the 1923-27 average for the period; the marketing of oats showed an opposite trend and the movement of corn gained in all three comparisons. Reshipments of wheat and oats from these centers increased over December 1927, but were smaller than in November and the five-year average. Stocks of wheat decreased somewhat and holdings of other grain at interior primary markets in the United States increased on January 12 in comparison with the corresponding Saturday of December. Wheat, rye, and barley inventories remained considerably in excess of a year ago; visible supplies of corn and oats were much smaller than those of January 1 last year. Trading in grain futures by members of the Chicago Board of Trade showed a recession in volume of 16.1 per cent in December from November and was 29.7 per cent less than a year ago. Chicago quotations for wheat futures, cash corn, and rye declined slightly in December from the preceding month; prices of oats, cash wheat, and corn futures averaged a little higher than in November.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	NOVEMBER 1928	DECEMBER 1927	
Production (bbls.)	— 5.6	— 3.7	31
Stocks of flour at end of month (bbls.)	+ 6.8	+10.3	27
Stocks of wheat at end of month (bu.)	— 3.6	+ 8.9	27
Sales (volume)	+ 2.8	+ 3.4	13
Sales (value)	+ 1.6	— 6.7	13

Production includes wheat and other flours. Balance of items refer to wheat flour only.

Meat Packing—Slaughtering establishments in the United States produced a larger tonnage of edible products in December than in the preceding month or a year ago. Employment for the last payroll of the period increased 0.3 per cent in number of employees and 0.7 per cent in hours worked, but declined 1.2 per cent in value compared with the corresponding figures for November. Demand in domestic markets averaged good for lard, fair to good for fresh pork, fair for beef, lamb, and smoked meat, and rather quiet for bacon and dry salt meats. Sales billed to domestic and foreign customers aggregated 8.3 per cent

in the number of depositors and of 1.0 per cent in average accounts over the beginning of December, according to a compilation for 203 reporting banks. Respective gains of 3.6, 2.3, and 1.3 per cent also were recorded over a year ago. Fifty-five banks, however, reported their deposits at a lower level than a month previous, and forty-eight found them below last year. Michigan average and total deposits declined from December 1, and there was a decrease in the number of accounts in Wisconsin, which together with a recession in the Illinois figures from the corresponding period of 1927, marked the only exceptions in which individual states failed to follow the general trend of the district.

Bonds—Demand for bonds during December, though light, was well distributed over the list of general market securities with some slight favor shown toward public utility and real estate issues. Institutions represented the majority of purchasers taking advantage of the drop in prices which occurred during December. Offerings of new issues were seasonally small, while sales in the aggregate continued to fall off in the comparisons with November and with December 1927. There was a slight tendency for securities to accumulate on dealers' hands.

less in value than in November, and 5.9 per cent in excess of a year ago, according to a compilation for sixty-one meat packing companies in the United States. The total value of sales billed during the calendar year 1928 by sixty-three concerns in the United States was 4.6 per cent greater than for 1927. Chicago prices of pork products declined in December from the preceding month, and those of beef, veal, and smoked meats were a little easier than in November; quotations remained steady for mutton, firmed slightly for lamb, and advanced for fresh hams. Inventories at packing plants and cold-storage warehouses in the United States showed a marked gain on January 1 over the beginning of December, and were considerably heavier than last year and the 1924-28 average for January 1; stocks of cured beef, however, declined from the five-year average.

Reports from representative companies show that shipments for export increased in December over the preceding period. Foreign demand for lard was better than in November; the United Kingdom purchased some meat from landed stocks, and the Continent took a fair tonnage of fat backs during the month. Prices continued close to United States parity; British quotations for lard, however, remained at a slight discount with Chicago. January 1 consignment inventories of packing-house products, already landed and in transit to European countries, were indicated as somewhat larger than those for the beginning of December.

Movement of Live Stock—Public stock yards in the United States received seasonally smaller numbers of cattle, calves, and lambs during December than in the preceding month, and the volume of cattle and calves was less than a year ago. Hog marketings increased over November and were in excess of last year.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, December, 1928.....	209,937	1,264,055	285,889	103,560
Federally Inspected Slaughter, U. S.				
December, 1928	666,879	5,782,036	1,052,721	340,699
November, 1928	762,045	4,455,273	1,189,416	377,969
December, 1927	761,143	4,868,608	1,093,964	376,486

Reshipments to feed lots showed the customary recession in December from the preceding month; the movement of

lambs gained over a year ago, but that of cattle was smaller than in the corresponding period of 1927.

AVERAGE PRICES OF LIVE STOCK (Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	JANUARY 12	DEC.	NOV.	DEC.
	1929	1928	1928	1927
Native Beef Steers (average).....	\$13.00	\$12.80	\$13.70	\$13.25
Fat Cows and Heifers.....	9.35	9.00	9.15	8.50
Calves.....	15.25	13.90	13.75	12.25
Hogs (bulk of sales).....	9.00	8.65	8.70	8.35
Yearling Sheep.....	13.50	10.95	10.15	10.30
Lambs.....	16.30	13.90	13.15	13.20

Dairy Products—Sixty-seven creameries in the Seventh Federal Reserve district manufactured 10.5 per cent more butter during December than in the preceding month, the volume being 2.2 per cent larger than last year. Production in the United States remained about on a level with November, according to statistics of the American Association of Creamery Butter Manufacturers, but was indicated as larger than for the corresponding period of 1927. The tonnage of creamery butter billed to customers by sixty-nine companies in the district totaled 0.6 per cent less than in

November and 19.5 per cent below a year ago. Receipts of American cheese at Wisconsin primary markets from factories within the state decreased 9.0 per cent during the four weeks ended December 29 from the preceding period and were 2.1 per cent below the volume for the corresponding weeks of 1927; redistribution from these centers declined 27.7 per cent and gained 1.3 per cent in the respective comparisons. Stocks of dairy products at cold-storage warehouses and packing plants in the United States showed the usual recession on January 1 from the beginning of December. Inventories of cheese and eggs increased and holdings of butter decreased in comparison with last year and the 1924-28 January 1 average. December receipts of butter and eggs at Chicago were in excess of November and a year ago; cheese arrivals decreased in volume. Chicago quotations for dairy products trended downward in December, with the average for the month a little higher for butter and cheese and slightly lower for eggs than in November.

INDUSTRIAL EMPLOYMENT CONDITIONS

The volume of employment in the Seventh district was well maintained during the period November 15 to December 15, manufacturing plants with an aggregate of about 345,000 workers reporting an increase of 0.4 per cent. Payroll amounts, however, reflected a less satisfactory situation, seven out of ten industrial groups reporting decreases, the average loss for all of the groups amounting to 2.0 per cent. Three groups registered increases in both men and payrolls: the textile industries in which the manufacture of men's clothing is on a seasonal upgrade; food products where meat packing, milk products, and tobacco were responsible for the gains; and the leather industries, including the manufacture of boots and shoes. Heavy declines in men and payrolls were shown in the vehicles group, covering the making of railroad equipment as well as of automobiles, in practically all building materials, and in rubber products. Lumber showed a slight gain in men but a large reduction in the amount of payrolls. Metals likewise reported increased employment with decreases in payrolls, probably the result of shorter working schedules.

At Detroit the volume of employment showed the usual seasonal decline for December, the total reported by the Employers' Association of that city falling 10.9 per cent below the figure for the last week of November. On January 1, 1929, the volume was 31.1 per cent higher than on the corresponding date a year ago—January 3, 1928. Some improvement in general employment conditions was caused by the requirements of the holiday trade, retail and department stores adding considerable numbers to their forces. The free employment offices of Illinois report that while the ratio of number of applicants to available positions remained unchanged from the preceding month at 144 per cent, the increase in the number of well qualified and responsible men and women out of work is adding a more serious aspect to the situation. Reports from the Iowa offices reflected an increase in unemployment, the ratio changing from 197 per cent to 247. For Indiana the ratio declined from 137 for November to 123 in December, but rose sharply the first week in January to 170 per cent.

EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED			WEEK ENDED		
	DECEMBER 15	NOVEMBER 15	PER CENT	DECEMBER 15	NOVEMBER 15	PER CENT
	1928	1928	CHANGE	1928	1928	CHANGE
All groups (10).....	345,628	344,419	+ 0.4	\$9,127,572	\$9,317,263	- 2.0
Metals and metal products (other than vehicles).....	144,806	143,327	+ 1.0	3,835,682	3,908,380	- 1.9
Vehicles.....	33,178	34,672	- 4.3	914,824	1,037,108	-11.8
Textiles and textile products.....	24,736	24,258	+ 2.0	594,797	536,810	+10.8
Food and related products.....	46,678	46,197	+ 1.0	1,208,888	1,193,715	+ 1.3
Stone, clay, and glass products.....	12,654	12,828	- 1.4	370,781	391,158	- 5.2
Lumber and its products.....	29,088	28,935	+ 0.5	670,556	734,559	- 8.7
Chemical products.....	9,300	9,356	- 0.6	247,887	251,862	- 1.6
Leather products.....	13,745	13,321	+ 3.2	292,655	269,163	+ 8.7
Rubber products.....	4,074	4,169	- 2.3	101,523	103,773	- 2.2
Paper and printing.....	27,369	27,356	+ 0.1	889,979	890,735	- 0.1

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—1928 output of automobiles in the United States not only exceeded the 1927 volume but was slightly larger than in 1926—the previous record year. Production of 3,826,613 passenger cars exceeded that of 1927 by 29.9 per cent and the 1926 figure by 0.2 per cent. Truck output of 530,771 was 16.7 per cent larger than a year ago and 10.2 per cent heavier than in 1926. December data show passenger car produc-

tion of 205,144 which is 5.6 per cent smaller than a month previous but 93.4 per cent greater than a year ago; truck output of 27,991 fell 29.5 per cent below November but exceeded last December by 1.8 per cent.

Distribution statistics for December indicate a larger number of cars sold at wholesale in the Middle West than either a month or a year previous. Retail distribution and sales of used cars declined in the month-to-month com-

parison but remained considerably heavier than the volume sold in the corresponding month of 1927. For the entire year 1928 distribution generally was in larger volume than in 1927. Deferred payment sales in December of thirty-six dealers reporting the item averaged 51.3 per cent of their total retail sales, which compares with 51.5 in November and 56.1 per cent for twenty dealers a year ago.

MIDWEST DISTRIBUTION OF AUTOMOBILES

	DECEMBER, 1928 CHANGES FROM		YEAR 1928 CHG. FROM	COMPANIES INCLUDED		
	NOV. 1928	DEC. 1927	YEAR 1927	NOV. 1928	DEC. 1927	YEAR 1927
New Cars						
Wholesale—						
Number sold	+15.5	+186.4	+13.1	38	28	28
Value	+7.2	+106.5	+5.2	38	28	28
Retail—						
Number sold	+23.8	+120.9	+25.1	95	74	74
Value	+23.0	+50.7	+13.9	95	74	74
On hand end of						
month—						
Number	-7.5	+12.3	+17.2*	64	44	44
Value	-14.5	+1.8	+10.1*	64	44	44
Used Cars						
Number sold	-15.9	+55.3	+12.4	95	74	74
Salable on hand—						
Number	+7.9	+20.1	+2.2*	62	42	42
Value	+4.8	+34.9	+13.5*	62	42	42

*Average monthly.

Agricultural Machinery and Equipment—December sales of agricultural machinery and equipment billed to domestic and foreign customers by sixty-nine manufacturers in the United States increased 28.9 per cent in the tractor, thresher, combination harvester-thresher lines, 2.6 per cent for "all other" (exclusive of barn supplies), and decreased 29.7 per cent for barn equipment, in the comparison with November. Gains of 114.6, 12.0, and 0.8 per cent, respectively, were recorded over last December.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

	Changes in December, 1928, from previous months		COMPANIES INCLUDED
	PER CENT CHANGE FROM NOVEMBER 1928	DECEMBER 1927	
Domestic sales billed.....	+8.6	+10.9	69
Sales billed for export.....	+14.4	+145.9	30
Total sales billed.....	+10.8	+42.0	69
Production	+3.6	+23.9	67

Production computed from average employment during the month. Sales based on value.

The total value of sales billed to domestic and foreign customers by eighty-three manufacturers in the United States was 22.3 per cent larger during the calendar year 1928 than in 1927, with a decided expansion in the heavy line and with substantial improvement in the light machinery and barn equipment groups.

Iron and Steel Products—A high level of activity was maintained during 1928 in the iron and steel industry of the Chicago district, sales and operations being larger than in several previous years. The automobile, building, and agricultural machinery industries contributed largely to the expansion in demand. December business was better than usual for the month and mills ended the year with a satisfactory amount of orders on their books. After the middle of December steel mill operations averaged 85 per cent of capacity and by the middle of January had increased to 88 per cent. December pig iron production in the Illinois and Indiana district gained slightly in the daily average over November, while that for the United States declined; the tonnage of both exceeded considerably that of the corresponding month of 1927. Steel ingot output in the country fell off slightly in the daily average for December, but was much larger than in previous years. Unfilled orders of the United States Steel Corporation on December 31 totaled 3,976,000 tons, an increase of 303,000 tons over November 30 and somewhat

higher than on the corresponding date of either 1927 or 1926.

Prices remained at fairly even levels throughout December and the first half of January, and averaged higher than since the middle of September 1927. Scrap iron and steel prices continued firm, with increases recorded in certain materials.

December shipments of steel casting foundries in the Seventh district declined slightly from November but considerably exceeded those of December a year ago, while malleable foundries showed increases in both comparisons. Orders booked by the former gained in the monthly but declined in the yearly comparison, and those booked by the latter indicated an opposite trend. Production of steel castings was heavier than in either the preceding month or December 1927; the tonnage produced by malleable foundries declined from November, though gaining over a year ago. Shipments, orders, and production of stove and furnace manufacturers during December fell off from the preceding month but were larger than in December 1927.

Shoe Manufacturing, Tanning, and Hides—Shoe factories in the Seventh Federal Reserve district reduced their operations 13.7 per cent in December from the preceding month, according to preliminary estimates released by the United States Department of Commerce. Reports from representative tanneries show district production and sales of leather as somewhat larger than in November but less than last year. Leather prices closed at steady to slightly lower levels than a month ago.

The Chicago market for packer green hides and calf skins was not so active as in November; purchases by district tanners also decreased, while shipments from the city increased. Prices showed little change in December from the preceding period, but trended downward early in January.

Furniture—Orders booked, shipments, and unfilled orders on hand the end of the month showed aggregate declines in December from November, according to the reports of twenty-three furniture manufacturers of the Seventh district; in the comparisons with a year ago, however, each item registered a large gain. Orders booked were 35.1 per cent less than a month previous but 27.4 per cent above those of December 1927. Shipments declined 13.3 per cent from November, though showing a gain in the comparison with figures for a year ago of 11.3 per cent. The volume of shipments exceeded new orders, and together with cancellations reduced unfilled orders on hand December 31 to 20.1 per cent below those held November 30; the amount, nevertheless, was 18.5 per cent over a year ago. The rate of operations averaged about the same as during November and slightly exceeded that for December 1927.

Raw Wool and Finished Woolens—During the first part of December the raw wool market continued strong and active. A change took place in the latter part of the month, however, when the holiday period and inventory-taking slackened the movement of wools. Prices remained very steady at November levels, the only noticeable change being a slight advance in three-eighths blood wools. Foreign markets have been quiet. Production and sales by woolen manufacturers showed little change from November; on the average, business has been more satisfactory than a year ago.

COAL

Colder weather the last of December and first half of January considerably accelerated demand for domestic sizes of coal in the Chicago market, although it had little effect on the market for steam coals. Prices for screenings, however, were strong throughout December and early January, showing only a slight weakness about the middle of the month. Despite reduced production over the holidays, the output from Illinois mines in December aggregated 5,833,790 tons, or 8.3 per cent more than in November, though less than the 6,308,540 tons mined last December. The 54,023,337 tons produced during the entire year 1928 exceeded the 1927 volume by more than 9,000,000 tons,

but the amount was smaller than in previous years. The number of mines operated in December (185) was the same as in the preceding month, while the number of men employed increased from 55,811 to 56,198 and the average number of days worked from 17.0 to 18.2.

December output of bituminous coal in the United States of 43,380,000 tons fell below the preceding month but gained over last December. Estimated production for the year 1928 of 492,755,000 tons was smaller than in any year since 1924. Distribution of bituminous coal from Lake Erie ports to American lake ports in 1928 exceeded that of other years.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

Market conditions in the lumber industry were considered good at the close of 1928, with prices steady or even slightly firmer than a month earlier. Stocks in hands of manufacturers and dealers of the district have shown further reductions and the aggregate volume held is below that of a year ago. Demand for lumber throughout December was quiet, sales at 229 retail yards showing a recession of 28.5 per cent, or a greater reduction than that reported in the preceding month. A decline of 3.0 per cent was shown in the comparison with December 1927. Dollar sales of seventeen manufacturing and wholesale concerns fell 5.2 per cent below November, but were 1.7 per cent higher than in the corresponding month a year earlier. In board foot measure, both comparisons registered declines of 5.1 and 6.6 per cent, respectively. Outstanding accounts of reporting firms also declined during the month, and at wholesale their ratio to sales volume averaged 138 per cent at the close of December, as compared with 148 and 139 a month and a year previous. For the reporting retail yards, the ratio was 416 per cent, as against 352 in November and 446 for December 1927. In the cement industry considerable curtailment of production has taken place, shipments have been somewhat below

normal for the season, and stocks continue to increase. The demand for brick also has been light and production reduced.

Building Construction—Contracts awarded in the Seventh Federal Reserve district during the last month of 1928 totaled \$76,923,507, of which \$32,469,935 was for residential building. This marks a decrease of over 20 per cent in both residential and total awards from the preceding month, while in comparison with December 1927, the loss amounts to 31.9 per cent on residential contracts and to 39.4 per cent in the total. Contracts awarded during the entire year, however, were 3.0 per cent larger than in 1927, with residential awards alone showing a gain of 5.6 per cent. Permit figures also registered declines from both the preceding month and a year ago, the number of permits issued in fifty cities of the district totaling 31.5 per cent less than during November and 8.0 per cent smaller than the previous December, while the estimated cost of these permits averaged 4.5 and 6.6 per cent lower in the two comparisons. Reports for fifty-two additional cities for which the monthly comparison is available showed a decline of 11.3 per cent in number of permits and of 20.6 in their estimated cost.

MERCHANDISING CONDITIONS

Wholesale Trade—The drug trade, where all firms reported gains in both the monthly and yearly comparisons, was the only wholesale line to show an increase in December sales over the preceding month, while half the groups had larger sales than a year ago. Total sales for the year

1928 exceeded 1927 by 0.5 per cent in groceries, 4.1 per cent in drugs, 2.6 per cent in shoes, and 19.7 per cent in electrical supplies. The year's sales were smaller in hardware and dry goods by 2.8 and 0.6 per cent, respectively. Prices in December held generally firm.

WHOLESALE TRADE DURING THE MONTH OF DECEMBER, 1928

	Net Sales During Month		PER CENT CHANGE FROM		Stocks at End of Month		PER CENT CHANGE FROM		Accounts Outstanding End of Month			PER CENT CHANGE FROM		Collections During Month	
	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	RATIO TO	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	PER CENT CHANGE FROM	
	PRECEDING MONTH	SAME MONTH LAST YEAR	PRECEDING MONTH	SAME MONTH LAST YEAR	PRECEDING MONTH	SAME MONTH LAST YEAR	PRECEDING MONTH	SAME MONTH LAST YEAR	DURING MONTH	PRECEDING MONTH	SAME MONTH LAST YEAR	PRECEDING MONTH	SAME MONTH LAST YEAR	PRECEDING MONTH	
Groceries	(32)—12.4	(32)— 3.3	(19)+ 1.9	(21)+10.1	(29)—14.4	(29)— 8.2	(29) 103.7	(25)+ 2.5	(25)— 2.2						
Hardware	(11)—16.5	(11)— 5.1	(8)+ 0.3	(8)— 4.7	(11)—10.9	(11)+ 0.3	(11) 213.6	(9)— 5.9	(9)+ 0.6						
Dry Goods	(12)—27.8	(12)+ 0.1	(10)— 9.5	(10)—20.4	(12)—17.3	(10)+ 4.6	(12) 348.0	(10)+15.1	(9)— 0.9						
Drugs	(14)+20.5	(14)+22.7	(12)— 1.8	(12)+ 4.0	(13)— 0.2	(14)+14.0	(14) 130.0	(9)+19.2	(7)+ 5.9						
Shoes	(7)—33.1	(7)— 7.9	(5)— 4.9	(5)— 3.3	(6)—14.5	(6)— 0.4	(6) 367.4	(5)+ 1.2	(5)— 6.8						
Electrical Supplies	(33)— 1.0	(33)+26.0	(25)— 5.0	(25)+ 9.5	(32)+ 2.3	(32)+30.9	(32) 114.6	(21)— 4.0	(21)+19.5						

Figures in parentheses indicate number of firms included.

Department Store Trade—December sales at ninety-six department stores of the Seventh district increased seasonally 50.5 per cent in the aggregate over November and exceeded December last year by 3.6 per cent. In the latter comparison, the smaller centers and Chicago and Detroit stores showed aggregate gains, while Indianapolis recorded a smaller total volume. Data for the year 1928 indicate similar trends, the total for the district increasing 4.6 per cent over 1927; Detroit showed the largest gain in this comparison, 1928 sales being 15.5 per cent in

excess of a year ago. Stocks averaged 19.6 per cent lower on December 31 than a month previous but were 5.1 per cent heavier than on the corresponding date of 1927. The rate of turnover for the month, 54.8 per cent, compared with 56.1 per cent last December, and that for the year 1928 averaged 411.2 against 404.0 for 1927. Collections increased 3.0 per cent in December over November and 11.7 per cent over a year ago, while accounts receivable December 31 gained 17.2 per cent in the monthly and 10.8 per cent in the yearly comparison. The ratio of December collections to the

amount outstanding November 30 was 40.3 per cent in 1928 or the same as in 1927.

Retail Shoe Trade—Twenty-five dealers and twenty-one department stores sold a volume of shoes in December 33.2 per cent larger than in the preceding month but 2.1 per cent below last December. Sales for the year totaled 2.9 per cent more than for 1927. Stocks on hand December 31 declined 14.4 per cent from a month previous, though averaging 11.0 per cent heavier than on the corresponding date of 1927. Accounts outstanding on dealers' books the end of the month fell off 3.2 per cent in the month-to-month comparison and gained 11.3 per cent over a year ago. Collections were 2.8 per cent less in December than in November but exceeded those in December 1927 by 33.2 per cent.

Retail Furniture Trade—Aggregate sales of furniture and house furnishings by twenty-five dealers and twenty-six department stores in the district increased 13.5 per cent in December over the preceding month and were 3.0 per cent above the volume of last December. The volume sold during the entire year gained slightly over 1927. December installment sales of twenty dealers gained 2.1 per cent in the comparison with November and showed no change from the corresponding month of 1927. Collections on installment sales were 2.3 per cent larger than in the preceding

month and 11.3 per cent above a year ago, while those on all sales gained 10.4 and 4.9 per cent, respectively, in the comparisons. Accounts receivable showed a 3.7 per cent gain on December 31 over November 30, and were 5.0 per cent in excess of the amount on the corresponding date of 1927. Stocks of dealers and department stores at the end of the month totaled 7.5 per cent below a month previous but averaged 9.5 per cent heavier than a year ago.

Chain Store Trade—The December-November increase in aggregate sales of twenty-one chains with 2,459 stores in operation, totaled 57.2 per cent, and the gain over December a year ago 12.3 per cent, the number of stores increasing 1.7 and 21.9 per cent in these comparisons. Average sales per store showed a gain of 54.6 per cent over November, but a decline of 7.9 per cent in the comparison with a year ago. All reporting groups—shoe, musical instrument, grocery, cigar, drug, five-and-ten-cent, men's and women's clothing—recorded expansion in aggregate sales in the month-to-month comparison, and all except musical instruments, cigars, and men's clothing reported increased sales over December 1927. For the year 1928 total sales gained 15.8 per cent over 1927, while average sales per store fell off 4.2 per cent from a year previous.

MONTHLY BUSINESS INDICES COMPUTED BY FEDERAL RESERVE BANK OF CHICAGO

(Index numbers express a comparison of unit or dollar volume for the month indicated, using the monthly average for 1923-1924-1925 as a base, unless otherwise indicated. Where figures for latest month shown are partly estimated on basis of returns received to date, revisions will be given the following month. Data refer to the Seventh Federal Reserve District unless otherwise noted.)

	No. of Firms	Dec. 1928	Nov. 1928	Dec. 1927	Nov. 1927
Meat Packing—(U. S.)—					
Sales (in dollars).....	59	107.4	115.4	101.1	99.3
Casting Foundries—					
Shipments:					
Steel—In dollars.....	15	65.4	67.5	55.6	62.0
In tons.....	15	67.3	67.7	52.1	58.1
Malleable—In dollars.....	17	75.0	72.9	59.9	52.3
In tons.....	15	96.1	94.0	75.3	68.7
Stoves and Furnaces—					
Shipments (in dollars).....	12	119.3	150.3	86.5	140.3
Agricultural Machinery & Equipment—(U. S.)—					
Domestic Sales (in dollars).....	83	88.9	79.6	82.4	80.0
Exports (in dollars).....	56	294.0	257.4	133.8	125.6
Total Sales (in dollars).....	83	124.3	108.2	90.7	87.3
Production.....	82	159.1	154.6	127.5	115.0
Furniture—					
Orders (in dollars).....	25	79.1	111.8	57.3	107.9
Shipments (in dollars).....	25	91.0	112.5	84.6	107.6
Electric Energy—					
Output of Plants (KWH).....	8	162.7	157.9	150.0	141.4
Industrial Sales (KWH).....	8	169.2	180.0	142.1	143.2
Flour—					
Production (in bbls.).....	32	95.7	101.4	103.0	113.3
Output of Butter by Creameries—					
Production.....	74	79.8	72.4	77.8	73.5
Sales.....	74	82.9	84.1	102.1	77.5
Automobiles—					
Distribution in Middle West:					
New cars—Wholesale—Number sold....	32	91.8	79.5	33.9	50.9
Value.....	32	68.1	63.5	32.2	46.5
New cars—Retail—Number sold....	84	60.3	79.1	29.9	34.3
Value.....	84	68.6	89.1	50.7	56.4
New cars—On hand—Number.....	48	143.7	155.3	119.8	117.8
Value.....	48	135.5	158.5	124.5	122.6
Used cars—Number sold....	78	103.1	122.6	63.5	93.5
Used cars—On hand—Number.....	46	153.4	142.2	129.7	117.9
Value.....	46	165.8	158.2	136.7	136.8
Production (U. S.): Passenger cars.....					
Trucks.....					
Trucks.....		78.0	110.6	76.6	68.6
Freight Carloadings—(U. S.)—					
Grain and Grain Products.....		108.8	118.4	98.2	103.9
Live Stock.....		89.9	99.6	89.1	104.9
Coal.....		108.3	116.1	101.6	100.2
Coke.....		94.1	91.9	86.1	78.7
Forest Products.....		79.6	91.9	73.9	87.3
Ore.....		27.8	84.6	22.0	42.1
Merchandise and Miscellaneous.....		99.1	113.2	92.4	107.0
Total.....		96.5	110.5	89.9	101.1
Iron and Steel—					
Pig Iron Production: ¹					
Illinois and Indiana.....		122.3	118.4	100.1	97.8
United States.....		110.7	112.1	88.5	89.9
Steel Ingot Production—(U. S.) ¹					
Unfilled orders U. S. Steel Corp.....		83.3	76.9	83.2	72.3
Wholesale Trade—					
Net Sales (in dollars):					
Groceries.....	36	86.5	99.4	89.7	98.7
Hardware.....	16	77.1	93.3	80.2	91.3
Dry Goods.....	12	71.4	97.9	71.1	90.9
Drugs.....	10	110.0	100.9	91.4	101.4
Shoes.....	8	62.1	95.3	69.0	91.7
Retail Trade—Dept. Stores—					
Net Sales (in dollars):					
Chicago.....	31	191.5	127.6	186.1	123.0
Detroit.....	4	266.4	178.1	235.8	155.9
Indianapolis.....	5	173.9	121.6	180.9	125.0
Milwaukee.....	5	175.1	130.6	180.5	129.3
Outside.....	58	171.2	112.3	168.4	110.1
Seventh District.....	103	197.8	133.4	190.5	127.1
Retail Trade—(U. S.)—					
Department Stores.....	565	187	122	186	122
Mail Order Houses.....	4	208	176	167	149
Chain Stores:					
Grocery.....	34	220	218	202	189
Drug.....	13	224	169	182	144
Shoe.....	7	184	130	178	118
Five and Ten Cent.....	14	305	158	279	146
Candy.....	4	170	130	164	125
Apparel.....	5	413	289	350	250
Cigar.....	4	155	107	156	105
Stamp Tax Collections—³					
Sales or Transfers of Capital Stock.....		399.0	422.6	150.1	107.4
Sales of Produce on Exchange—Futures.....		53.6	63.4	65.9	76.3
U. S. Primary Markets—³					
Grain Receipts:					
Oats.....		54.5	52.0	55.6	57.6
Corn.....		201.6	133.2	172.3	76.8
Wheat.....		93.9	122.9	73.6	126.9
Grain Shipments:					
Oats.....		40.5	41.1	35.1	47.0
Corn.....		88.5	56.7	76.9	44.6
Wheat.....		59.6	105.0	53.0	105.9
Building Construction—					
Contracts awarded (in dollars):					
Residential.....		110.6	140.5	162.5	154.7
Total.....		112.3	145.2	185.2	122.9
Permits:					
Chicago.....	Number	38.4	47.3	44.3	65.4
Cost.....		82.4	72.9	82.9	100.1
Indianapolis.....	Number	33.1	49.1	38.4	63.2
Cost.....		58.4	81.1	40.4	60.4
Des Moines.....	Number	24.2	45.4	22.2	52.6
Cost.....		32.9	33.7	14.6	19.9
Detroit.....	Number	41.1	61.3	39.5	59.3
Cost.....		70.8	68.9	121.7	47.4
Milwaukee.....	Number	60.7	71.6	66.3	84.3
Cost.....		178.4	103.4	86.4	76.3
Others (45).....	Number	44.4	74.4	49.4	85.0
Cost.....		64.9	116.9	68.2	122.9
Fifty Cities.....	Number	45.1	65.5	48.8	74.1
Cost.....		80.0	83.8	85.8	90.1

1. Average daily production; 2. First Illinois internal revenue district; 3. Monthly average receipts 1923-24-25=100.

